U. S. FISH AND WILDLIFE SERVICE PRESCRIBED BURNING PLAN

Stillwater NWR National Wildlife Refuge

Stillwater Point Reservoir Unit

Prepared By	: Rob Bundy/Bill Henry	Date: 10/28/96
Reviewed By:	: Dan Walsworth Refuge Manager	Date:
Reviewed By:	Robert Flores Asst. Refuge Manager	Date:
Reviewed By:	Regional Fire Management Coordinator	Date:
has the auth compliance w	d Prescribed Fire Plan constitutes the authority to burn without an approved plan or with the approved plan. Actions taken in escribed Fire Plan will be fully supported.	in a manner not in compliance with the
Approved By:	Assistant Regional Director Refuges and Wildlife	Date:

ANNUAL PRESCRIBED BURNING PLAN

Station: Stillwater NWR

Name of Area: Stillwater Point Reservoir

Specific Portion of Above: Central 2/3 (app. 1200 ac.) of wetland management

unit.

Legal Description: T. 19N R. 31E Sec.(s) 15,20,21 County: Churchill

Physical Features: Central segment of management unit (see accompanying map)
has become overgrown with dense, rank, monotypic growth of narrow leaved
cattail (Typha domingensis).

Vegetative Cover Types: (Species, Height, Density, etc.) Unit is primarily comprised of late successional plant associations including Typha domingensis, Typha domingensis/Scirpus acutus, and Tamarix ramossissima. Affected area vegetative cover percentages are as follows:

Vegetation Type	Acres	8	Fuel Model
Typha domingensis Scirpus acutus Tamarix ramossissima Emergent/Open water/Other	900 70 40 190	75.0 5.8 3.3 15.8	
Total	1200	99.9	

Estimates are based on aerial observation of Stillwater Point Reservoir.

Primary Resource Objectives: To return vegetative coverage to early successional, more productive conditions (i.e. to allow vegetation to return to "hemi-marsh" conditions more suitable for waterfowl brood use).

Specific Objectives of Burn: To reduce extant coverage of Typha domingensis to 20% of current to provide mud flat conditions for spring migration of shorebird populations, allow new growth of native annuals (e.g. Bassia hyssopifolia) for migration and wintering foods for waterfowl, and to set back succession for eventual retoration of "hemi-marsh" (50% emergent/50% open water) conditions for waterbird nesting cover and waterfowl brood use. Ideally, vegetative height will remain at water level (approximately 2") to facillitate regrowth of emergent species.

Historical Fire Occurrence: Details of burn history are lacking; however, periodic burning of residual vegetation during wetland drying cycles has occurred related to anthropogenic sources (i.e. Paiute/Shoshone Indian Tribe) and natural lightening strikes. This unit was recently burned in 1992 to control salt cedar encroachment following sustained drought. In the absence of biological controls (e.g. muskrat: Ondatra zibethicus), burning appears to be the most viable and desirable option to set back succession in wetland management units. Periodic removal of dense, residual vegetation is necessary to productive wetland cycles.

PRE-BURN PLANNING AND ACTION

Site Preparation: (what, when, how, & who) At present, water from Stillwater Point Reservoir is being distributed both to the Canvasback Gun Club and refuge wetland management units. This will result in drawdown conditions (i.e. 1 or 2 inches of standing water) more suitable to the proposed burn (i.e. sufficient soil moisture to reduce generated heat and associated "peat" fires). The proposed burn area is bounded by sparsely vegetated upland areas to the north, south, and east; however, backfires or some form of mechanical treatment may be required to offset the chance of fire spread to upland areas. Adherance to optimal weather standards for the proposed burn should minimize the chance of fire spread. Pre-burn action will be facillitated by the Stillwater NWR biological staff and maintenance crew.

Safety Considerations: Weather conditions will be monitored to ensure ideal conditions on the day of the proposed burn. Low fuel cover on adjacent upland areas should minimize the possibility of fire spread beyond the proposed burn area: however, escape routes, vehicles, and a fire truck will be identified prior to and available on the day of the proposed burn to facilitate emergency evacuation of personnel. The local fire department and sherriff's office will be contacted and will be available prior to burn. No special safety considerations have been identified as the area is not available for public access.

Media Contacts: Ideally, the proposed burn will be low profile; however, the burn does allow for a potential public relations opportunity to help explain how we use fire to manage wetland management units. Potential contacts include:

1.	Monie Byers	Lahontan Valley News	Fallon
2.	Mike McGinnis	KVLV Radio	Fallon
	John Trent	Reno Gazette Journal	Reno
4.	Larry Muchowski	Channel 8 News	Reno
5.	Paul Bean	Outdoor Nevada	Las Vegas

The Fallon news media will be advised to help inform the local community as to our intentions.

Special Constraints and Considerations: The size of the proposed burn area and the amount of residual vegetation (fuel) do warrant consideration of the number of personnel required to safely administer the proposed burn. Available support staff (e.g. rural fire department) should be available for emergency loss of fire control.

Communication and Coordination: The local fire department and refuge office dispatch will be notified prior to the proposed burn. Two teams of refuge personnel and the refuge fire truck will be in contact by shortwave radio on a frequency of 163.075 mhz. Other frequencies of concern that will be monitored include:

1.	Nevada Division	. of Wildlife	155.190
2.	Churchill Count	y Sherriff	151.475

Interagency Coordination: The proposed burn area is relatively isolated and falls completely within Stillwater NWR boundaries; however, adjacent lands to the south, east, and southwest are either privately owned, administered by the Bureau of Land Management (BLM), or managed by the Truckee Carson Irrigation District (Diagonal Canal). All adjacent concerns will be notified prior to

the proposed burn. Additionally, staff with the Nevada Department of Wildlife (NDOW) will be informed and invited to participate where their expertise may enhance success of the proposed burn. The local response unit is the Bureau of Land Management.

IGNITION, BURNING, and CONTROL

	_	01(11101), 1011				
	Planned or Proposed					Actual
Sch	eduling:					
	Dates	Early December	-Late	March		
	Time of day	Mid morning -	Early	afternoo	<u>n</u>	
Wea	ther Conditions:	Acceptab	ole Pr	escriptio	n Range	
			Low	Desired	High	Actual
	Temperature (broad	range):	30	50	70	
	Relative Humidity:	(high - low):	15		50	
	Wind Direction:			s - W		
	Wind Speed (20' fo	recast):	0		10	
	Wind Speed (Mid Fl (40% of 20' or e	.ame): ye level)	0		5	
	Cloud Cover (%):		0		50	
Env	rironmental Condition	ons:				
	Soil Moisture (%):			High		
	Fuel Moisture:		5		25	
	Litter/Duff Moist	ire:		60		
	Live Fuel Moisture	2 :				
må.	re Behavior:					
E T.			Q+	p flank i	Fire	
	Type of Fire:			-b rrank i		
	Rate of Spread:		3		110	
	Intensity:		30		1400	
	Flame Length:		2		13	

Energy Release Component:

Heat/Unit Area:

Ignition Technique: Driptorch to backfire along firebreaks (located at north and east edges of proposed burn area) and strip flank firing to burn out area.

Prescribed Fire Organization: As previously stated, the proposed burn will be conducted by Stillwater NWR personnel including:

Burn Boss: Ignition Specialist: Delvin Lee

Bill Henry

Dan Dear born

Ignition Crew

Rob Bundy Bill Henry Don DeLong Holding Specialist: Holding Crew

Bob Henderson Ernie Lantto

Weather Observer:

Rob Bundy

Dispatcher:

Caroline Johnson

Crew briefing will immediately precede the proposed burn to ensure that personnel involved are completely aware of their particular responsibilities.

SMOKE MANAGEMENT:

Distance and Direction from Smoke Sensitive Areas: The proposed burn will be conducted approximately 7 miles NE of the Fallon Naval Air Station (NAS) and 13 miles ENE of Fallon.

Necessary Transport Wind Direction and Elevation: Wind direction must be either south or west to ensure that smoke sensitive areas are not affected. The preferred wind direction would be SSW to carry the fire across the proposed burn area. The desired wind direction would carry smoke either into the Stillwater Mountain Range (W or SW) or into the Stillwater NWR (S). Both areas see relatively low public visitation during the proposed burn period. Elevation is inconsequential.

Visibility Hazards: County road 1/4 mile west of unit.

Actions to Reduce Visibility Hazards: Ensure that wind direction is appropriate.

Residual Smoke Problems: Considerable smoke will be created from the proposed burn; however, the fire should be relatively short-lived and soil moisture will be high enough to eliminate peat fires. Residual smoke should not be a problem.

FUNDING AND PERSONNEL:

	Equipment & Supplies	Labor	Overtime	Staff Days	Total Cost
Administration: (planning)	na	100\$	na	1	100\$
Site Preparation: Ignition and Control:	na 150\$	na 300\$	na 0\$	na 4	0\$ 450\$
Travel/Per Diem: Monitoring/Eval.:	na na	na 100\$	na na	na 1	0\$ 100\$
Total:	150\$	500\$	0\$	6	650\$

BURN DAY ACTIVITIES:

Public/Media Contacts: Media contacts were covered previously.

Crews and Equipment Assignments:

Burn Boss/Manager Ignition Specialist - Delvin Lee Ignition Crew

- Bill Henry - Rob Bundy

Bill Henry Don DeLong

Holding Specialist Holding Crew Weather Observer Dispatcher

- Bob Henderson - Ernie Lantto

- Rob Bundy - Caroline Johnson

Crew Briefing Points: A tailgate briefing will occur prior to ensure that everyone is aware and comfortable with their responsibilities.

Ignition Technique: Backfires will be completed either early on the day of the proposed burn or the day immediately prior to. Initial ignition of flanking fires will be completed by Rob Bundy, Bill Henry, and Don DeLong.

Personnel Escape Plan:

Holding and Control:

Contingency Plan for Escaped Fire:

Mop up and Patrol:

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Reviewed	Ву:	Bill Henry	Refuge Biologist	Date:_		
Reviewed	ву:	Dan Walsworth	Refuge Manager	Date:_		
Reviewed	By:_	Robert Flores	Asst. Refuge Manager	Date:_		
Reviewed	Ву:	Regional Fire Man	agement Coordinator	Date:_		
has the a	autho ce wi	rity to burn witho th the approved pl	an constitutes the authout an approved plan or an. Actions taken in coill be fully supported.	in a mar	mer not in	one
Approved	By:_	Assistant Regiona	l Director	Date:_		-

Refuges and Wildlife

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	Acceptar		_	_	The last of T
	7		Desired	_	Actual
Temperature (broad	_	30	50	70	
Relative Humidity	: (high - low):	15		50	
Wind Direction:			s - W		
Wind Speed (20' fo	orecast):	0		10	
Wind Speed (Mid Fi (40% of 20' or e	lame): eye level)	0		5	
Cloud Cover (%):		0		50	
Environmental Condition	ons:				
Soil Moisture (%)	:		High		
Fuel Moisture:		5		25	
Litter/Duff Moist	ıre:		60		
Live Fuel Moisture	2 :				
Fire Behavior:					
Type of Fire:		Stri	p flank f	ires	
Rate of Spread:		3		110	
Intensity:		30		1400	
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Heat/Unit Area:					

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Monitoring/Eval.:	na	100\$	na	1	100\$
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